REMARKS

Claims 1-36 are pending. Claims 23-36 are new. In view of the foregoing amendments and following remarks, Applicants respectfully request allowance of the application.

CLAIM OBJECTIONS AND OTHER INFORMALITIES HAVE BEEN OVERCOME

The specification has been revised to address the inconsistencies noted in paragraphs 3-5 of the office action. The amendments suggested in paragraphs 6-7 of the office action have been adopted.

ALL CLAIMS DEFINE OVER THE ART.

Claims 1-22 stand rejected as anticipated by Kranich, U.S. Patent No. 6,185,675. Applicants request withdrawal of this ground of rejection because Kranich does not teach or suggest all elements of the claims.

Claims 1-5 Are Allowable Over Kranich.

Consider claim 1, which recites building an instruction segment, determining whether the instruction segment satisfies a filtering condition, and if the instruction segment satisfies the filtering condition, storing the instruction segment in a segment cache. Kranich does not teach or suggest determining whether the instruction segment satisfies a filtering condition. The Office Action admits as much, noting that Kranich's system stores ***all*** building blocks in memory. The Office Action reasons, however, that such a determination must be inherently performed before Kranich's system stores a building block. Applicants respectfully suggest that this analysis reads the claims out of context and is inconsistent with the claims' plain meaning in English.

Claim 1 is written in clear "if, then" format. It requires a determination to be made (some kind of check) to determine if a filtering condition is met and, if the condition is met, it requires a response (storage of the instruction segment to memory). Although claim 1 is drafted broadly – the Office Action correctly notes that claim 1 does not specify the type of filtering condition that is applied – the claim still requires an inquiry to be made to determine whether the filtering condition is satisfied. This understanding is confirmed when the claims are

read in light of the specification. Kranich discloses no such inquiry -- no check. The Office Action admits as much. Accordingly, the rejection to claim 1 should be withdrawn.

Dependent claims 2-5 specify four different filtering conditions, none of which are disclosed by Kranich. They include:

- the filtering condition may be met only if all instructions in the instruction segment assembled into the instruction segment from an instruction cache of a front-end processing system in a processor.
- the filtering condition may be met only if at least one instruction in the instruction segment assembled into the instruction segment from an instruction cache of a front-end processing system in a processor.
- the filtering condition may be met only if a predetermined number of instructions in the instruction segment assembled into the instruction segment from an instruction cache of a front-end processing system in a processor.
- the filtering condition may be met only if an instruction of the segment by which the segment is to be indexed was assembled into the instruction segment from an instruction cache of a front-end processing system in a processor.

Again, the Office Action acknowledges that none of these filtering conditions are disclosed expressly. Instead, it argues these conditions are disclosed inherently by the reference. Respectfully, this is incorrect. First, it cheats the claim of their plain meaning as disclosed above. Second, it is inconsistent with the requirements of inherency.

Arguments based on inherency are permitted only when the allegedly inherent characteristic ***necessarily*** flows from the teachings of the applied prior art. MPEP, § 2112. In other words, the missing subject matter must be present. The fact that the undisclosed subject ***may*** be present is not enough to support an inherency argument. MPEP § 2112. So, when there are several alternative means of doing something, inherency cannot be applied.

Here, claims 2-5 recite four alternative filtering conditions. The Office Action admits that Kranich discloses none of them expressly. The fact that the claims define alternatives for each other renders inherency arguments inapplicable. The anticipation rejection to claims 2-5 also must be withdrawn.

Claims 6-10 Are Allowable Over Kranich.

Claim 6 recites building an instruction segment, determining, from location flags associated with instruction in the instruction segment, whether the instruction segment satisfies

a filtering condition, and if so, storing the instruction segment in a segment cache. Again, Kranich does not teach or suggest all of these features.

Like claim 1, claim 6 requires that a determination be made whether an instruction segment satisfies a filtering condition. As noted, this element recites an inquiry – has the filtering condition been met? Kranich requires no such inquiry because his system stores ***all*** building blocks. This is a first basis on which claim 6 distinguishes Kranich.

Claim 6 also requires that the determination be made from location flags. Kranich fails to disclose any location flags within his system. The Office Action implies that, absent some specific definition in the specification, this term may be interpreted in whatever manner is convenient to support a rejection. Claim terms must be interpreted according to their plain meaning. "Flags" are well known features of modern computing systems. See, for example, Newton's Telecom Dictionary, 18th ed. p. 301 (a variable to indicate that a condition has been met) (attached). Applicants' usage of the term is entirely consistent with understandings of the art. Kranich does not disclose flags of any kind in determining whether to store an instruction segment and, therefore, claim 6 is allowable.

The rejections to dependent claims 7-10 suffer from the same flaws as those to claims 2-5. Inherency theories cannot be applied to reject several claims, which recite features that are alternatives for each other. To do so violates the requirement that inherently present subject matter ***must*** flow from the disclosure of a reference. MPEP § 2112. Again, it is not sufficient that the missing subject matter ***may*** be present in the reference. Claims 7-10 are allowable over Kranich.

Claims 11-22 Define Over Kranich.

The anticipation rejection to independent claims 11 and 18 must be withdrawn because Kranich does not teach or suggest a segment builder that stores a new instruction segment in the segment cache when a filtering condition is met. This claim structure recites the if/then structure of preceding claims in another form. As noted above, Kranich does not disclose this subject matter and, therefore, the rejection to independent claims 11 and 18 should be reversed. The rejection to dependent claims 12-17 and 19-22 also should be reversed.

Claims 12 and 19 recite a history map to indicate when a filtering condition is met. As recited in the corresponding independent claims, the instruction segment is stored when the filtering condition is met. The Office Action argues that the history map corresponds to Kranich's BBSB 42. Applicants respectfully disagree. Kranich's BBSB 42 it identifies the location of basic blocks that have ***already*** been stored in the BBC 44:

> Instead of storing basic blocks, BBSB 42 is configured to store information about the corresponding basic blocks in BBC 44. Kranich, Col. 8:23-25.
>
> Fetch addresses are routed in parallel to both BBSB 42 and BBC 44... Upon finding a match, BBSB outputs two pointers... Pointer 52c is routed to BBC 42's second port (port 2)... The next clock cycle, BBC 44 receives the fetch address in its first read port and pointer 52c in its second read port. During this clock cycle, BBC 44 outputs the corresponding basic blocks (e.g., BB_n and BB_{n+1}). Kranich, Col. 12:40-55.

Thus, while the claims require use of a history map to indicate whether to store an instruction segment in the future, Kranich's BBSB 42 is relevant to blocks that were stored in the past. Kranich's BBSB does not anticipate the history map of claims 12 or 19.

NEW CLAIMS 23-36

New claims 23-36 are presented. These claims present the inventive subject matter of the present application in alternative forms to provide a robust claim set for examination.

All claims define over the cited art. Applicants respectfully request allowance of the application.

Respectfully submitted,

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Fixed Satellite Service A radiocommunication service between Earth stations as specified fixed points when one or more satellites are used; in some cases this service includes satellite-to-satellite links, which may also be effected in the inter-satellite service, the fixed-satellite service may also include feeder linker for other space radiocommunication services.

Fixed Satellite System FSS. A system of Geosynchronous Earth Orbiting (GEO) satellites. GEOs are positioned in equatorial orbits approximately 22,300 miles above the Earth's surface. Positioned in this manner, they are synchronized with the rotation of the Earth. Therefore, they are always (more or less) fixed in the same physical location relative to the Earth's surface. This allows satellite antennas on the ground to be fixed and not have to move to follow the movement of the satellites. Actually, fixed orbit satellites do slide out of their orbit slightly. Their onboard rocket engines are then started and they are brought back into geosynchronous orbit. See also GEO. Contrast with LEO and MEO.

Fixed Wireless See Fixed Wireless Local Loop.

Fixed Wireless Local Loop FWLL. Imagine a community of 100 people spread out in a huge area in one of the Western states in the United States — e.g. Montana or Wyoming. Imagine a city of people eager to get faster Internet access and better, cheaper phone service than their local phone company can provide. The local loop is best described as the "last mile" of phone service. It's the distance between you, the customer, and the switching office down the street or across the county that's owned by the local telephone company. In most cases, local loop service uses old-fashioned twisted copper wire installed and provided by the ILEC — the incumbent local exchange company (your local phone company). However, several phone companies and several of their competitors are installing coaxial cable, fiber optics, their own cable and now fixed wireless, also called "Wireless Fiber." Such systems operate at the 38 GHz portion of the spectrum. They generally consist of a pair of digital radio transmitters placed on rooftops — one at one end at the central office and the other end at the customers' offices. It's called "fixed" to contrast it with "mobile," e.g. cellular. In order to attract customers, some fixed wireless providers are offering higher data transmission rates than wire. In 1998, for instance, one firm announced a new, fixed wireless network that would carry 128 Kbps of digital transmission right into most households. Based on the 10 MHz spectrum, the new system would connect a home to a digital switching center via a neighborhood antenna mounted on a utility pole or other structure. A single antenna would serve up to 2,000 homes. Meanwhile, the customer would only need to secure a transceiver to the side of their house.

FL Fault Locating.

FL-port Fibre Channel term. Port that connects an FC-AL to a fabric.

Flag 1. A variable in a program to inform the program later on that a condition has been met. 2. In synchronous transmission, a flag is a specific bit pattern (usually 01111110) used to mark the beginning and end of a "frame" of data. Frame Relay and lots of other protocol use this approach in order to delineate one frame from another, and to allow the devices in the network to synchronize on the rate of transmission for purposes of improved bandwidth efficiency. See Frame Relay, Synchronous and Zero Stuffing.
3. Fiberoptic Link Around The Globe. A consortium of phone companies owning an underwater submarine cable made of multiple strands of fiber, each strand carrying information at five gigabits per seconds. Each strand of fiber is unidirectional, i.e. you need two to make a conversation, one for going and one for coming.

Flag Fall Also spelled flagfall. Older taxis had a metering system which had a large metal lever facing vertically up. It was called a flag because it sort of looked like one. When a customer got into the taxi, the driver pulled the metal flag down. This action started the meter. All taxis typically charge a fixed money the moment you get into the taxi and then so much a mile and/or a minute after that. In some countries, that initial money became known as flag fall. In some countries, when you first make a phone call, they charge you a fixed amount however long the call is and then a certain amount of money based on how long you talk and how far you talk. That initial call setup charge has become known as a flag fall in some countries, including Australia.

Flag Sequence HDLC, SDLC, ADCCP, Frame Relay. The unique sequence of eight bits (01111110) employed to delimit the opening and closing of a frame.

Flagfall See Flag Fall.

Flame An outpouring of verbal abuse that network users write about other users who break the rules. A wonderful term for getting mad via electronic mail. People who frequently write flames are known as "flamers." You can flame by simply sending messages ALL IN CAPS!!!!!!!!! See Flame Fest, Flame War and Mail.

Flame Bait An intentionally inflammatory posting in a newsgroup or discussion group designed to elicit a strong reaction thereby creating a flame war.

Flame Fest Massive flaming. See Flame.

Flame Mail Slang term for rude electronic mail. Bill Gates, Microsoft chairman, is said to be famous for the flame mail he sends to employees who don't perform according to his likings. Mr. Gates is famous for flame mail sent by him between midnight and 2:00 AM.

Flame Resistant Insulated wire which has been chemically treated so it will not aid the spread of flames.

Flame Retardant Constructed or treated so as not be able to convey flame.

Flame War What happens when people send too much flame mail at each other. The online discussion degenerates into a series of personal attacks against the debaters, rather than discussion of their positions. A heated exchange.

Flaming To send an insulting message, usually in the form of a tirade, sent via online postings but also as personal. Flaming is the verb. Flame is the noun. And too much of flaming can cause a nasty flamewar.

Flamingo, Pink Don Featherstone, of Massachusetts, is the father of the pink flamingo plastic lawn ornament. He graduated from art school and went to work as a designer for Union Products, a Leominster, Mass. company that manufactured flat plastic lawn ornaments. He designed the pink flamingo in 1957 as a follow-up project to his plastic duck. Today, Featherstone is president and part owner of the company, which sells an average of 250,000 to 500,000 plastic pink flamingos a year. www.flamingomania.com/outdoor1.html.

Flammability Measure of a material's ability to support combustion.

Flapping Flapping occurs when a routing table entry changes too often in a relatively short time. It is sometimes caused by a link going up and down or by receipt of conflicting routing updates. See also Bouncing Circuit.

Flash Quickly depressing and releasing the plunger in or the actual handset-cradle to create a signal to a PBX or Centrex that special instructions will follow such as transferring the call to another extension.

Flash Button A button on a phone which performs the same thing as quickly pressing the switch hook on a phone. See Flash, Flash Hook, Flasphone.

Flash Crowds This refers to a published event (i.e. Victoria Secret's Fashion Parade) that receives an overwhelming amount of interest leading to network congestion. The term dates back to a 1973 Larry Niven science fiction story in which the development of teleportation causes thousands of people to suddenly teleport to a location where something interesting is happening.

Flash Cut The conversion from an old to a new phone system occurs instantly as one is removed from the circuit and the other is brought in. There are advantages and disadvantages to Flash Cuts. For one, they're likely to be much more dangerous than the opposite view, known as a Parallel Cut, in which the two phone systems run side by side for a month or so. Also known as Cutover and Hot Cut.

Flash EPROM A type of EPROM that can be electronically erased. It differs from EEPROM in that generally the entire memory must be erased at once.

Flash Hook Another name for Switch Hook. The little button on the telephone that you place your receiver into. It obviously hangs the phone up, releasing that line to receive another call. If you push the flash hook quickly, you can signal the switch at the other end (central office or PBX) to do something, such as place a call on hold and switch to the incoming one (call waiting), or transfer the call to another phone. See Flash and Flash Button above.

Flash Memory Flash memory is nonvolatile storage — i.e. storage that can retain information without electricity — but which can be electrically erased and reprogrammed. Flash memory occupies little space and doesn't need continuous power to retain its memory. Some laptop companies, like Toshiba, are using flash memory as nonvolatile storage for the BIOS (Basic Input/Output System) and the instructions that start the computer (the bootstrap loader). See also Flash Rom and Memory Cards.

Flash RAM Flash Random Access Memory. A very fast type of RAM that can quickly be erased and rewritten, Flash RAM also retains data when powered off. Typical applications include modems and removable storage media for devices such as PDAs and laptops. See also DDR-SDRAM, DRAM, EDO RAM, FRAM, Microprocessor, RAM, RDRAM, SDRAM, SRAM, and VRAM.

Flash ROM Flash Read Only Memory. Read Only Memory that can be erased and reprogrammed, but stays on when power to your computer is turned off. Flash ROM is used in modems, for example, to hold software known as firmware. When a later software release comes out, you dial a distant computer which downloads new software into your